

FM/AM CD TUNER

# **INSTRUCTION MANUAL**

KENWOOD CORPORATION



©PRINTED IN JAPAN B64-0280-00 (M) (MC) 94/12 11 10 9 8 7 6 5 4 3 2 1 93/12 11 10 9 8 7 6 5 4 3

#### **▲**WARNING

## To prevent fire and avoid personal injury in case of accidents

- Make sure the faceplate is securely locked in place.
- When extending the power supply, memory backup or ground lead, avoid short circuits by using 0.75mm² (AWG 18) or larger automotive grade cable.
- Check to be sure that no metal objects (tools, needles, coins) are left inside the unit.
- If you smell or see smoke, disconnect the unit immediately and consult your KENWOOD dealer. Continued use can cause a fire or permanent damage to the unit.

## **ACAUTION**

## To keep the unit in proper working order

- Be sure it's connected to a 12V DC power supply with a minus ground connection.
- Do not open front panel or top or bottom cover.
- Do not expose this unit to direct sunlight or high heat.
- Keep it clean and dry.
- Be sure it is fastened securely and not exposed to excess vibration.
- Do not leave the remote control unit in high temperature such as from direct sunlight. It results in the deformation of the case.

#### **ACAUTION**

# This unit is equipped with a theft deterrent faceplate. To prevent damage to the faceplate and case

- Avoid exposure to direct sunlight and heat. High temperatures can cause deformation and warping.
- · Avoid exposure to water.
- The faceplate is a high-precision instrument. When the faceplate is detached, store it in its special case. Never drop it or subject it to other shocks.
- Do not touch the faceplate terminal or faceplate mount with your fingers.

## NOTE

- If you have difficulty in installing this unit in your vehicle, please contact your KENWOOD dealer.
- If it doesn't seem to be working properly, first press the Reset button.
   If the malfunction persists, consult your KENWOOD dealer.



Reset buttor

#### **CARE AND MAINTENANCE**

#### Cleaning

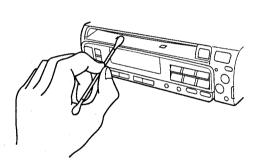
- Always turn the power OFF before cleaning.
- Wipe the front panel and other exterior surfaces with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.

#### **ACAUTION**

 DO NOT use abrasive pads or paint thinner, benzene, or other volatile solvents. These may remove the indicator characters.

#### **CD** slot cleaning

Since dust accumulates in the CD slot, it will sometimes need to be cleaned. Discs loaded in dusty slots may be damaged.

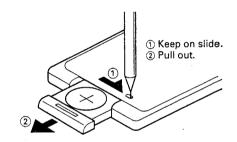


# Cleaning the faceplate terminal

If the faceplate terminal or faceplate mount terminal become dirty, wipe them clean with a soft, dry cloth.

# Replacing battery of remote control unit

- The battery life is approximately a half year. When the life has expired, please replace the battery with a new battery.
- The remote control unit uses a lithium battery (CR2025).
- Insert battery following the illustration inside the battery box, taking care not to reverse the ⊕ and ⊕ polarity.



## LENS FOGGING AND HEAT PROTECTION

#### **Lens Fogging**

In cold climates, there may be a period after you turn on your vehicle's heater when
the lens that guides the laser beam used in your CD player fogs up. If this happens,
your CD player will not work properly. If you wait about an hour, the fogging will
disappear and your CD player will work normally.
 If it does not return to normal, please contact your KENWOOD dealer or authorized
service center.

#### **Heat Protection**

• In warm climates, when vehicles are left standing in direct sunlight with the windows closed, the temperature inside can rise above 60°C. Your CD player's protection circuits will then display the message "HOLD" and prevent the player from operating. Just open the windows or turn on the air conditioning. As soon as the "HOLD" message disappears, the player will operate normally. If it does not return to normal, press Reset button before use.

## HANDLING COMPACT DISCS

■ Stains, dust, scratches or warping can cause skipping or other malfunctions. To enjoy your discs for a long time, please handle them as follows.

#### <Holding a Disc>



 Avoid touching the music storage area (the part with the alistening rainbow colors).



Do not use paper tape on the label or music storage area.

#### <Storing Your Discs>

 Do not store discs where they will be exposed to direct sunlight, high heat, or humidity.

• Especially in summer, never leave your discs exposed to sunlight on the dashboard or on the seat with the windows closed. High heat can cause warping.

 If you do not use your player for an extended period of time, remove the disc magazine from the changer and store it in a cool, dry place.

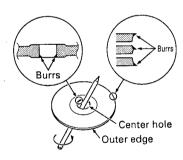
• Store your discs in their cases or in the magazine. To avoid scratches, dirt, or warping, do not leave them lying around without cases, piled up, or leaning on each other.

#### <Cleaning Your Discs>



 If there are fingerprints or stains on a disc, wipe them off with a soft cotton cloth, wiping from the center to the outside edge.
 Never use paint thinner, benzene or conventional record cleaners.

#### <Check Your New Discs>



 Some new discs have burrs on their outer edges or around the hole in the center. Use a ballpoint pen or similar instrument to remove them. Discs with burrs may not fit properly in the player or disc magazine, causing skipping when they are played.

#### <Disc Accessories>

• There are several types of stabilizers, protective seals, and other disc accessories on the market, which claim to offer improved sound quality or disc protection. These accessories can, however, change the dimensions or thickness of a disk and may cause the disc changer to malfunction. They should not be used on discs played in this unit.

6

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#### **FEATURES**

#### **TUNER FEATURES**

Auto seek tuning (p.13)
 Automatically searches for stations you can receive.

• Local scan (p.15)

When this feature is turned on, it combines scanning and Auto Memory and presets only strong stations offering good reception.

Monaural tuning (p.15)

When stereo reception conditions are poor, turning on this function switches reception to monaural, improving sound quality by reducing noise.

Preset stations (p. 19)

Stores the frequencies of your favorite stations in memory, for one-touch tuning.

Auto memory (p.20)

Automatically stores the strongest stations you can pick up, for one-touch tuning.

• Preset seek (p.21)

Receives stations which have been stored in memory in order.

Priority preset (p.22)

This feature allows instant one-touch access to a station you often listen to (for news, traffic information, etc.), regardless of your tuner's operating mode.

Direct access tuning (p.23)

This remote control feature allows you to input a frequency to listen to that station of your choice.

#### **■ CD PLAYER FEATURES**

Track repeat (p.25)
 Plays the same track repeatedly.

• Track scan (p.26)

Automatically plays the first part of each track on the disc in sequence, to help you find the one you want.

Random play (p.27)

Plays the tracks on a CD in random order.

• Direct track search (p.28)

This remote control feature allows you to enter the number of the track you wish to hear by pressing the appropriate number keys.

# ■ CD AUTO CHANGER FEATURES

- CD auto changer control (p.29-38)
   Controls operations of the CD auto changer.
- Track repeat (p.31)
   Plays the same track repeatedly.
- Disc repeat (p.31)
   Plays the same disc repeatedly.
- Track scan (p.32)
   Automatically plays the first part of each track on the disc in sequence, to help you find the one you want.
- Automatically plays the first part of each disc in the CD auto changer, to help you find the one you want.

  Especially helpful when you cannot remember the number of the disc you want.
- Random play (p.34)
   Plays the tracks on a CD in random order.
- Magazine random play (p.35)
   Plays discs and tracks of discs in your auto changer in random order.
- Memory play (p.36) Selects 20 tracks from a disc magazine and stores them in memory. The stored tracks can be played in the order they were stored in memory.
- Direct track/disc search (p.38)
   This remote control feature allows you to enter the number of the track or disc you wish to hear by pressing the appropriate number keys.

#### **FEATURES**

#### **■ CONVENIENT FEATURES**

Remote control (p.18)

This unit can be operated using the wireless remote control supplied as an accessory. Some features require the remote control.

Clock display (p.39)
 Displays the time in the display window.

Preset tone (p.42)

Adjusts the tone controls (bass, midbass and treble) and stores their settings in the memory. The stored tones can be recalled with a one-touch operation.

Selectable illumination (p.44)
 Allows illumination color to be switched between green and orange.

Selectable display type (p.45)
Lets you change the display from
negative to positive or vice-versa.

Phone interface (p.46)
 Pauses the player automatically whenever a call is received.

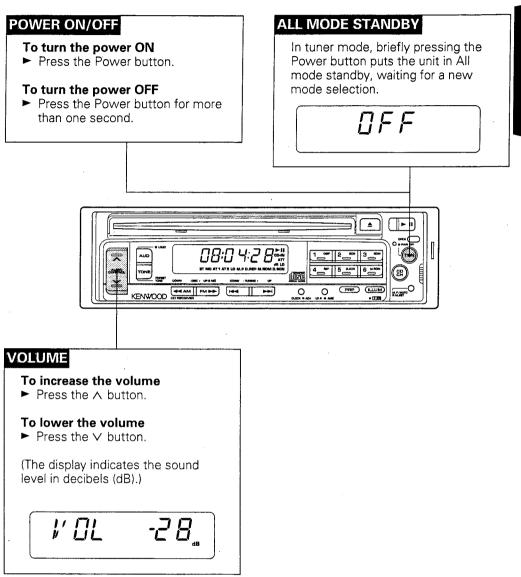
Theft deterrent faceplate (p.47)
 When you leave the vehicle, you can take the faceplate with you, to help prevent theft.

Channel band selection (p.48)
 Allows you to switch bands between FM:200kHz/AM:10kHz and FM:50kHz/AM:9kHz.

Automatic illumination
 Causes the display panel to light up when the vehicle's lights are on.

# Your new CD Tuner

## **ON/OFF, ALL MODE STANDBY & VOLUME CONTROLS**



## NOTE

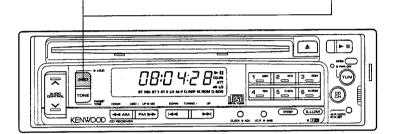
- Turning the power ON automatically restores the settings in use when the unit was turned OFF.
- Perform these operations with the power ON.

► If the Loud indicator light is not illuminated, press the Loud button for more than one second. (Loud indicator light will light up. Both bass and treble volume increase.)

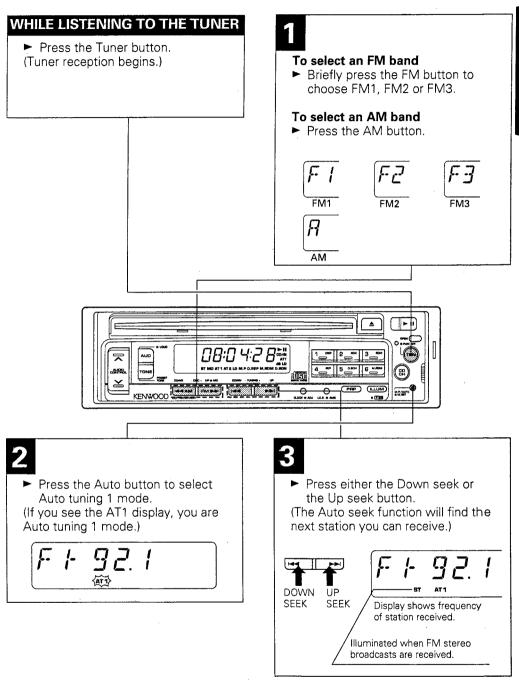
F + 92.1

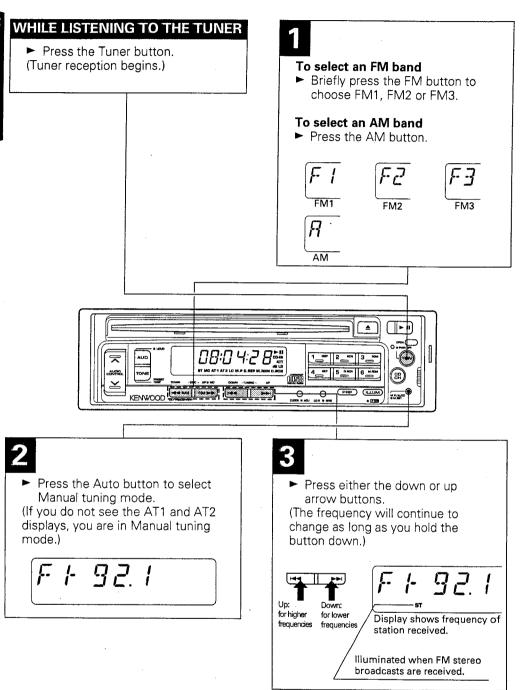
#### TO RESTORE ORIGINAL LEVELS

➤ Press the Loud button again for more than one second.
(Loud indicator light will go out.)

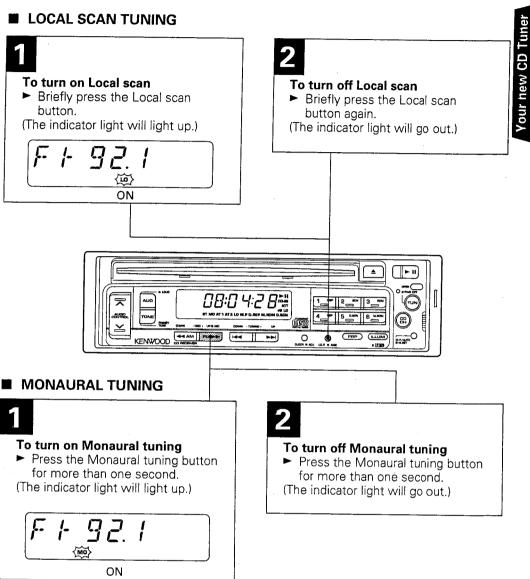


## **AUTO SEEK TUNING**

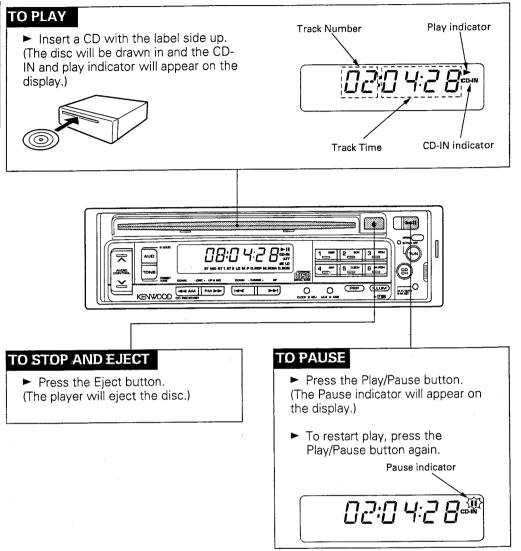




## LOCAL SCAN AND MONAURAL TUNING



## TO PLAY COMPACT DISCS



## NOTE

- If you press the Play/Pause button before a disc that has been ejected is removed from the disc slot, it will be drawn back into the player and played, automatically.
- To protect your discs, the player automatically draws in any disc that has been ejected but not removed within 15 seconds.
- Do not attempt to insert a disc in a slot where there is already another disc.

16 Your new CD Tuner

## SKIP AHEAD/SKIP BACK

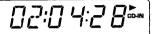
Operation	Press
Skip Ahead	<b>&gt;&gt;</b>
Skip Back	44

The action will stop when you release the button.

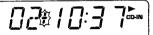
#### TIME DISPLAY

► Each time you press the Display button, the display switches between current track and total CD playback time.

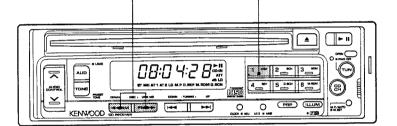
(The "+" indicates total CD playback time.)



Current track playback time display



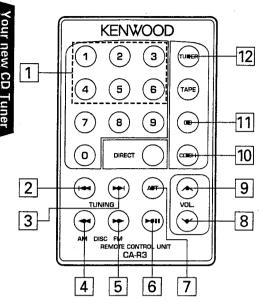
Total CD playback time display



#### **ACAUTION**

 This unit is designed for playing 12cm(5in.) compact discs. Attempting to play 8cm(3in.) discs may damage the unit and should be avoided.

## **USING THE REMOTE CONTROL**



TUNER:
Press to select preset stations.

2 CD: Plays the previous track. TUNER: Shifts the lower frequency. CD CHANGER Plays the previous track.

3 CD: Plays the next track. TUNER: Shifts to higher frequency. CD CHANGER: Plays the next track.

QD: Skip back the CD. TUNER: Switches to AM bands. CD CHANGER: Plays the previous disc.

18 Your new CD Tuner

CD:
Operates in CD Mode.
TUNER:
Operates in Tuner Mode.
CD CHANGER:
Operates in CD Changer Mode.

© CD: Skip ahead the CD. TUNER: Switches to FM1/FM2/FM3 bands. CD CHANGER: Plays the next disc.

© CD: Plays or pauses playing of a CD. CD CHANGER: Plays or pauses playing of a CD.

To restore previous level

Press this button again.

8 Lowers volume.

9 Increases volume.

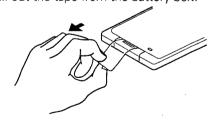
Press for CD changer mode.

11 Press for CD mode.

Press for Tuner mode.

## NOTE

Before using this unit for the first time, pull out the tape from the battery box.





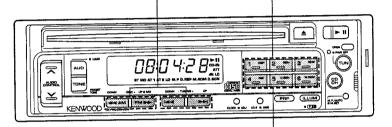
Select the band and station you want to preset.

2

► Press the Preset station button you want to use for more than two seconds.

(When the station is entered in memory, the number of the button to which you've assigned it will appear on the display.)

F + 92.1 EX



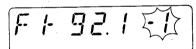
3

By repeating steps 1 and 2 you can preset each button for one station each from the FM1, FM2, FM3 and AM bands.

#### 4 USING PRESET STATIONS

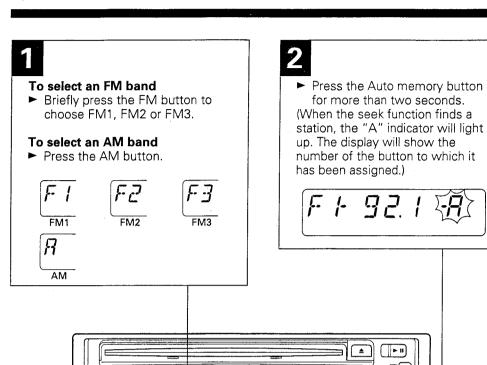
► Briefly press the button of the station you want.

(When you press the button, you will hear the station assigned to it.)



#### NOTE

• When you assign a preset station to a button, the previous setting will be erased.



3

When six stations have been found, the Auto memory function stops. You will hear the last station selected.

## 4 USING PRESET STATIONS

► Briefly press the button of the station you want.

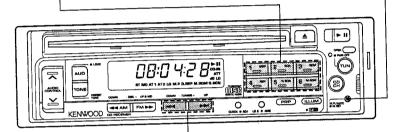
(When you press the button, you will hear the station assigned to it.)

F + 92.1

Store a station frequency for each Preset button.

► Press the Auto button to select Auto tuning 2 mode. (If you see the AT2 display, you are in Auto tuning 2 mode.)





Down preset seek
► Press the I◄ button. (The station stored in the previous Preset button is received and the button number is displayed.)

Up preset seek

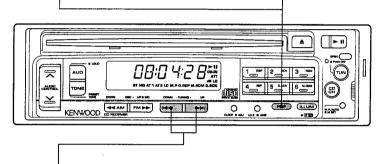
▶ Press the ▶▶I button. (The station stored in the next Preset button is received and the button number is displayed.)

► Press the Priority preset button. (As soon as reception begins.)

#### TO TURN IT OFF

Press the Priority preset button again.

(The tuner will return to the previous mode.)



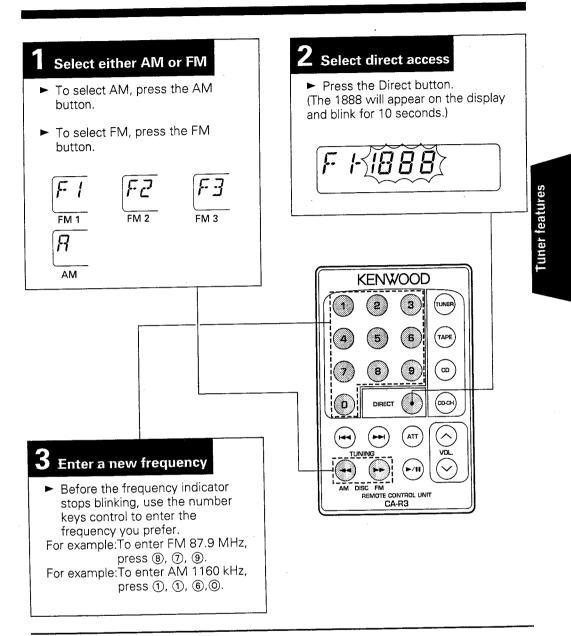
#### TO CHANGE THE PRIORITY PRESET

► Press the Priority preset button and tune to the station you want. (The next time you press Priority preset, the tuner will shift to this station automatically.)

## NOTE

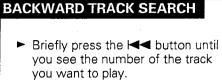
• Only seek and manual tuning can be used in Priority preset mode.

22 Tuner features



## NOTE

You cannot enter frequencies your tuner cannot receive.



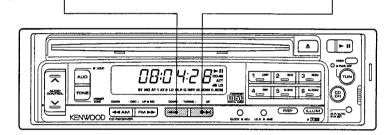
The unit will begin playing the track shown on the display.

Track No.

#### FORWARD TRACK SEARCH

► Briefly press the ►►I button until you see the number of the track you want to play. The unit will begin playing the track shown on the display.





1

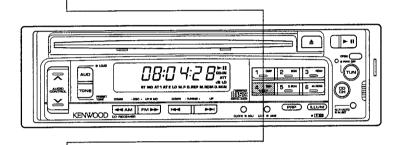
➤ To repeat the track you are listening to, press the Track repeat button.

repeat button.
(The Repeat indicator will appear on the display.)



2

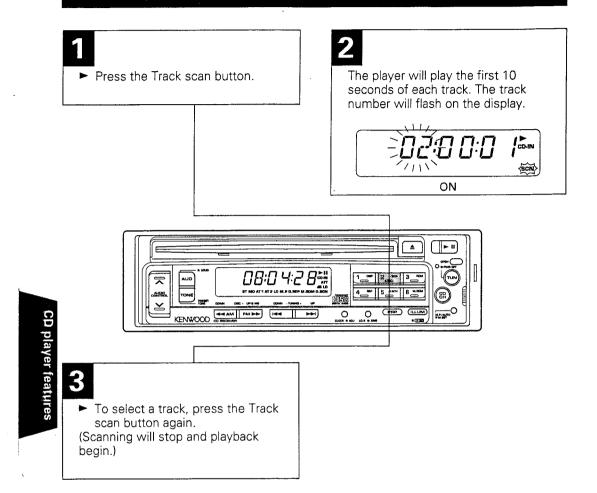
The player will repeat the track you are playing.



#### TO STOP

► Press the Track repeat button again.

(The Repeat indicator will disappear.)



► Press the Random button. (The Random indicator will light up, and the player will randomly select another track from the disc you are playing. The track numbers on the display will change continuously.)



When the track is selected, playback will begin automatically.

3 TO SELECT ANOTHER TRACK

► Press the ►►I button. (The player will randomly choose another track.) TO STOP

► Press the Random button again. (The disc play returns to normal.)

#### **■ DIRECT TRACK SEARCH**

1

Use the number keys to enter the number of the track you want.

(When the player reaches the track you've selected, its number will blink for 10 seconds.)

For example. To listen to track

number 7, press ⑦.

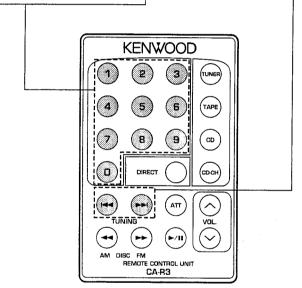
To listen to track number 12,

press ①, ②.

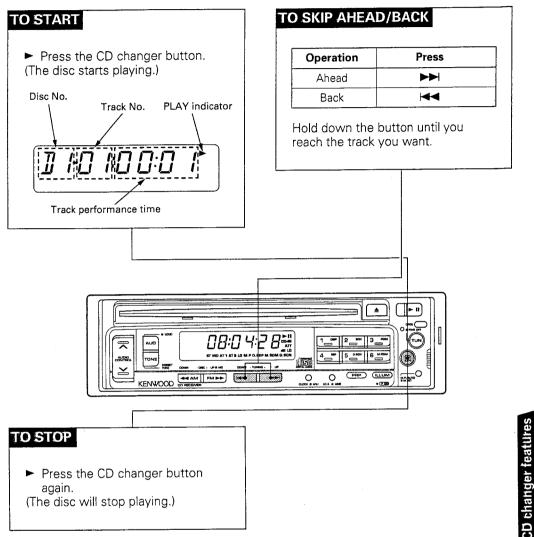
2

To skip forward or backward, press the ►►I or III buttons.

CD player feature



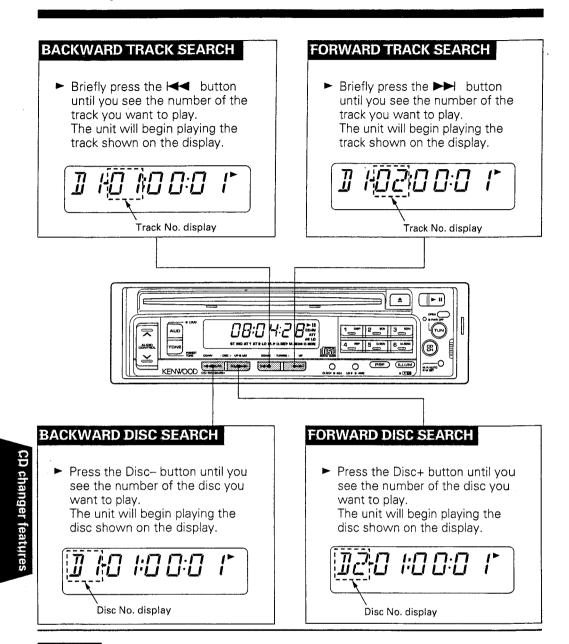




#### NOTE

- When the player reaches the end of the last track on the disc you are playing, it will shift automatically to the first track on the next disc in order.
- When you change the discs in the autochanger, the Load indicator will appear on the display.
- "0" indicates the No. 10 disc.

## TRACK/DISC SEARCH



#### NOTE

- If you try Backward track search while playing track No. 1, the player will resume play at the start of track No. 1.
- If you try Forward track search while playing the last track on a disc, nothing will happen.

**30** CD changer features

# CD changer features

#### TO START TRACK REPEAT

► Press the Repeat button. (The Repeat indicator will appear on the display, and the player will repeat the track you are playing until you cancel repeat.)



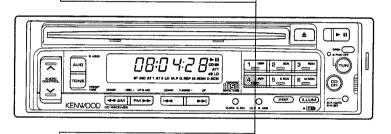
Track repeat ON

#### TO START DISC REPEAT

► Press the Repeat button twice. (To use Track repeat function, press the Repeat button once.) (The Disc repeat indicator will appear on the display, and the player will repeat the disc you are playing until you cancel repeat.)



Disc repeat ON



#### TO STOP

► Press the Repeat button again. (To use Track repeat function, press the Repeat button twice. To use Disc repeat function, press the Repeat button once.) (The Disc repeat indicator will disappear.)

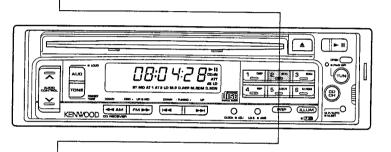


► Press the Track scan button.

2

The player will play the first 10 seconds of each track. The track number will flash on the display.



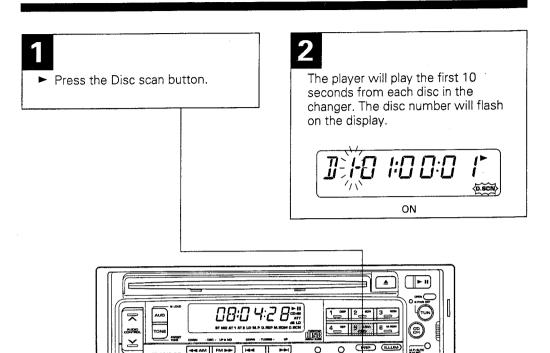


3

► To select a track, press the Track scan button again.
(Scanning will stop and playback begin.)

CD changer feature

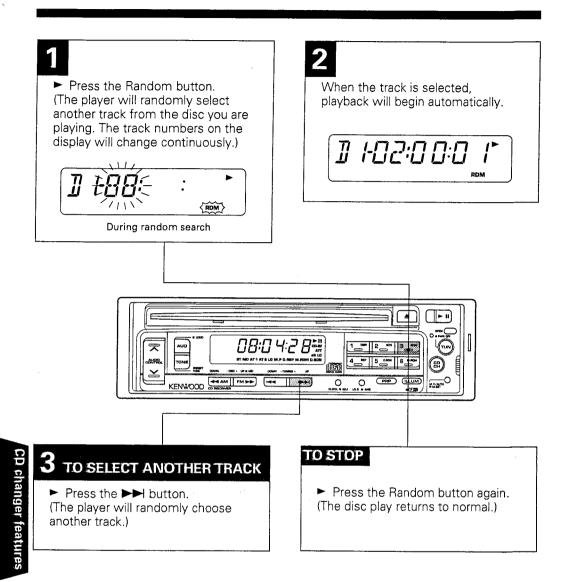




3

 To select a disc, press the Disc scan button again.
 (Scanning will stop and playback begin.)

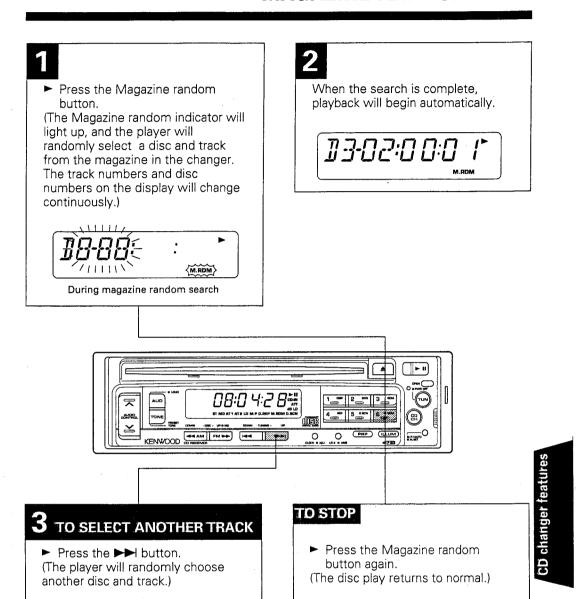
## **RANDOM PLAY**



#### NOTE

- When all the tracks on a disc have been played, the player will randomly select the next disc.
- 34 CD changer features

## **MAGAZINE RANDOM PLAY**

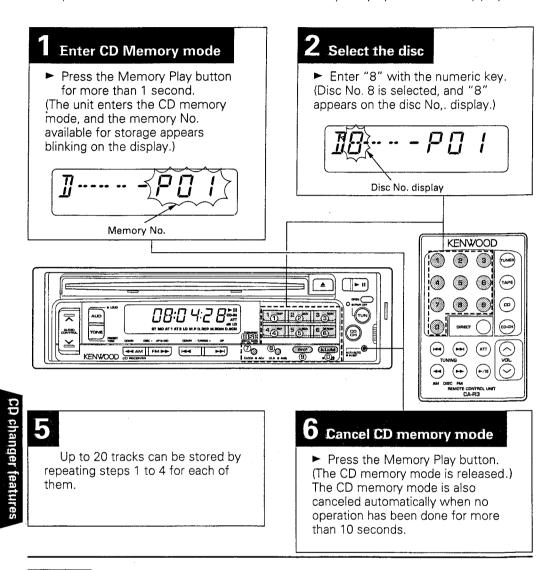


## **NOTE**

This function is not available if you use the KDC-C100/C200/C300/C400/C301/C401 as the CD auto changer.

#### **MEMORY PLAY**

Example: To store track No. 6 on disc No. 8 in memory and play it with memory play.



#### NOTE

- Enter "0" to select disc No. 10.
- To change the content of memory, display the memory No. to be changed by pressing the 
   → button before step 2, and enter new disc and track Nos. by proceeding to steps 2 to 4.
- The memory content can be cleared by entering "0" as the disc No. and "00" as the track No.
- **36** CD changer features

## **SPECIFICATIONS**

Specification subject to change without notice.

Disc Section Laser Diode Digital Filter (D/A) D/A Converter Spindle Speed Wow & Flutter Frequency Response (±1 dB) Total Harmonic Distortion (1 kHz) Signal to Noise Ratio Dynamic Range Channel Separation Laser Diode Properties Material	8 Times Over Sampling
Wavelength Emission Duration Laser Output Power * This output is the value measured at a distance of 200 mm surface on the Optical Pick-up Block.	780 nm Continuous Less than 44.6 μW
FM Tuner Section Frequency Range Channel Space Usable Sensitivity 50 dB Quieting Sensitivity Frequency Response (±1 dB) Signal to Noise Ratio (IEC-A) Selectivity (DIN) Capture Ratio Stereo Separation (1 kHz)	
AM Tuner Section Frequency Range Channel Space Usable Sensitivity	9 kHz
Audio Section Max. Power Output	15 W $\times$ 2 or 6 W $\times$ 4
Preout Level (10 kΩ)	1.0 V
General Operating Voltage Current Consumption Operating Temperature Installation Size (W×H×D)  Weight	